

On an Australian variety of *NERITINA PULLIGERA*, Linn.

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The following new variety of *Neritina* was obtained by Robert Johnstone, Esq. (and sent to the Curator of the Sydney Museum) in the mountain streams of the Bellenden Kerr Ranges, Northern Queensland.

NERITINA PULLIGERA, var. *SULCATA*. n. s.

N. t. calyptriformis, crassa, tumida, via obliqua, marginem versus latiore, periostraca olivacea, parum nitida, concolor, haud erosa, concinne induta; spira omnino oclusa; anfr. 2? regulariter oblique, conspicue, late sulcatis, sulcis rotundatis, lævib.; apertura polita, ampla, expansa, semilunari, luteo-aurantiacea, cæruleo-alba anguste marginata; area columellaris planata, intense cæruleo-atrata, ad apicem conspicue, lateque callosa; peristoma acutum, labro superne canaliculato, retroque curvato; labio acuto, dentibus parvis, inconspicuis, numerosis munitis. Operculum testaceum, olivaceum, politum, læve, vel tenuissime striatum, fasciis intensioribus spiraliter ornatum; apice postico, marginali.

Maj. diam. 24-30, min. 18-24, alt. 11-15, millim.

Shell cup-shaped, thick, a little oblique, tumid, broader towards the margin, neatly covered by an olive, slightly shining, periostraca, which is not eroded; spire altogether hidden; whorls two, regularly, obliquely broadly sulcate; sulci rounded, smooth; aperture polished, ample, expanded semilunar, yellowish orange, narrowly margined with blueish white; columellar area flattened, of an intense blue-black, with a conspicuous broad callosity behind; peristome sharp; labrum channelled above and curved back, lip sharp with many fine small teeth. Operculum testaceous, olive, shining, smooth, or very finely striate, and ornamented with dark bands; apex posterior and marginal.

This shell is a variety of *N. pulligera*, Linnæus, but the differences are that our shell is yellow, not purple in the throat; the aliform prolongation of the labrum is much less marked, in

fact is scarcely perceptible, and the shell is smaller. It must be admitted that these features are not more than slight, and from the fact that the fluviatile shells of Australia have a very wide range this may be a local variety. I have not, however, distinguished it as a species, and for those who think the characters sufficient it can stand as *N. pulligera* var. *sulcata*. *N. pulligera* is common in the Molluccas, Philippine Islands, and has been found in the Pacific Ocean, New Caledonia (?). There is a specimen in the Sydney Museum marked as from Guadalcanor. This variety is also closely allied to *N. petitti*, Recluz, to which it approaches in size, though it is smaller. The lip and columella differ in color and shape. In *N. petitti* it is of rich reddish brown, darker at the margins, but in this species it is light orange, &c., as described. There are four *Neritinæ* described from Australia, viz., *N. tritonensis*, Le Gillon, densely reticulated; *N. auriculata*, Lam. (as from New Holland), broadly auriculate at each side of the aperture; *N. baconi*, Reeve, from Swan River, lineated or flexuously reticulated with black lines; *N. dringii*, Recluz, spirally branded with yellow. All the above are smaller than the present species or variety.

N. pulligera was described by Linnæus as a "smooth coarse shell with an excavated eye-like small spire; inner lip smooth crenated." With the above named author it was a *Nerita* and came under his section C, meant for a division with imperforate shells and toothed lips. According to him it appears to have been figured by our countryman Lister (tab. 143) by Seba (*Mus.* 3. t. 41, figs. 23-26) by Rumphius (*Mus.* tab. 22). Gmelin gives other references, notably to *Born* in his Catalogue of the Museum of the Empress of Austria in volume of plates, No. 17, figs. 9 and 10, and *Chemnitz* vol. 9, plate 124, figs. 1078, 1079. Gmelin also says that it inhabits the rivers of India and is from 14 to 16 lines long. He adds "shell hard, very finely striate transversely, pellucid black or brownish or reddish (*sic* in Turton's edit.); whorls two, one very large and terminating in an acute tooth; throat glabrous, polished, with a fine blue or whitish bottom, near the margin a broad fulvous band; inner lip ascending, glossy."

Blumenbach (*Nat. Hist.* p. 265) states that *N. pulligera* matures its offspring within the shell and carries them about with it, from which circumstance the name "*pulligera*" has been given. Müller (*Verm. Terr. et Fluv.* vol. 2, page 196), says that "the yellowish white granules which frequently occupy the back of the shell are the young of the Nerite as Rumphius shows. I have counted 235 in one specimen. But for the authority of Rumphius I should have taken them to be the ovules of some wandering anamalculæ." The following is the passage in full:—" *Grana quæ dorsum cochleæ frequenter occupant, esse ipsius Neritæ pullos, Rumphius docet; horum ducenta triginta quinque in uno specimine numeravi, ovalia, convexa, extus luteo albida, intus alba, moleculis referta, corpuscula hæc sæpe absterguntur, remanente in testa circulo ovali albo. Nisi obstaret auctoritas exactissimi Rumphii ovula peregrini animalculi putarem.*"

MELANIA ONCOIDES. n. s.

M. t. fusiformi turrata spira elata, decollata, periostraca pallidissima lutea aliquando induta, lineis rufis, undulosis longitudinaliter insignita; anfr. 6, convexis, declivibus, liris spiralibus quatuor regulariter cinctis, in spira liris nodosis et oblique subplicatis, sutura bene impressa; apertura oblongo-ovata, antice effusa, labro acuto, labio calcareo.

Long. 20, lat. 10, long. apert. 9, lat. 7. Common in the creeks near Bourke, Darling River. James Ramsay.

Shell fusiformly turretted, spire produced, decollate, sometimes covered with a very pale yellow periostraca, marked longitudinally with red undulating lines; whorls 6, convex sloping, regularly spirally girdled with four liræ; in the spire the liræ are distinctly nodose and obliquely subpligate, suture well impressed, aperture, oblong ovate anteriorly effuse, labrum acute, lip chalky.

This *Melania* comes very close in form and coloring to *M. onca*, Angas, which is found in the fresh water streams about Port Darwin, N. Australia. The difference in this species are:—
1. It is much smaller. 2. Conspicuously lirate. 3. The plaits are almost obsolete and rarely seen, except on the upper whorls.

As, however, all our freshwater shells have a very wide range, this may be a variety, and the observed differences are due to climate. The lat. of Bourke is about 30°, or nearly 600 miles N. W. of Sydney. The habitat of *M. onca* is from 14° to 12° S. of the Equator. I should mention, also, that the tropical species is covered with a dark olive periostraca, while *M. oncoides* has scarcely any, and of a light straw color.

EXHIBITS.

Mr. Ramsay exhibited two species of Pigeon, *Chrysæna victor* (Gould), and *Lamprolia victoria* (F. & H.), from Fiji. Also various Crotons, showing remarkable variations in foliage and color, from Duke of York Island, and two specimens of Hybrid *Coleus*, a leafy arborescent *Euphorbia*, and a remarkable example of *Aralia filicifolia* (?) from the same locality.

MONDAY, 25TH FEBRUARY, 1878.

W. J. STEPHENS, ESQ., M.A., President, in the Chair.

DONATIONS.

The SECRETARY reported receipts from the Hamburg Society of Natural History of their "Verhandlungen des Vereins für Naturwissenschaftliche Unterhaltung in Hamburg, for 1871-74 and 1875."

PAPERS READ.

On a new genus of MILLEPORIDÆ.

By the Rev. J. E. TENISON-WOODS, F.G.S., F.L.S., Cor. Mem.
Lin. Soc., N.S.W., &c.

The family of *Milleporidæ* were formerly included by zoologists amongst the *Zoantharia* in an entirely different class from the